

## ARIZONA DEPARTMENT OF PUBLIC SAFETY Wireless Systems Bureau



## Arizona Interoperable Radio System

A.I.R.S.

Presented By Greg Manning Telecommunications Project Manager



## I.A.R.S. IMPLEMENTATION



- Mid Late 70s Interagency Arizona Radio System
- VHF & UHF Base Stations at Key locations
- Each radio controlled at a Dispatch Center
- Linked allowing DPS to talk to VHF Users
- 15 sites were in operation by 1999

## IARS Coverage as of 1999

**South Mountain** 

**White Tanks** 

**Thompson Peak** 

**Towers Mt** 

**Greens Peak** 

**Mule Mountain** 

**Mount Elden** 

Bill Williams Mountain

**Heliograph Peak** 

**Guthrie Peak** 

**Hualapai Mountain** 

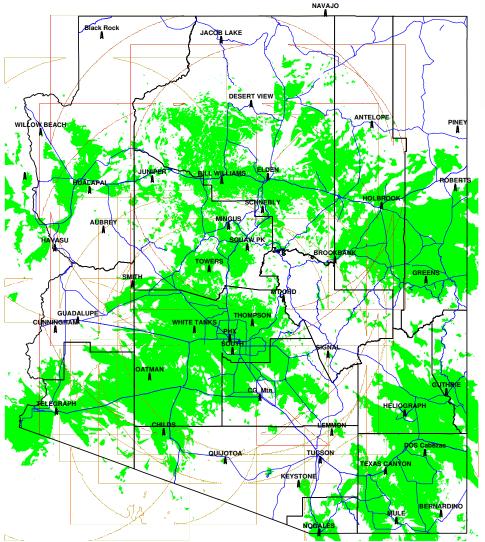
**Nogales Hill** 

**Telegraph Pass** 

**Oatman Mountain** 

**Childs Mountain** 

#### IARS RADIO COVERAGE







## I.A.R.S. Modernization & Expansion



### 2006 Brought Modernization and Expansion

### Arizona Interoperable Radio System - A.I.R.S.

- Funding Assistance from the Homeland Security Grant
- Modernizing to a "suite" of Radio Repeaters
  - VHF Radio Repeater
  - UHF Radio Repeater
  - 800 MHz Radio Repeater
- Expanded to 45 Potential Sites for A.I.R.S.





#### **PROPOSED SITES**

**ANT – Antelope Mesa** 

**BER - Bernardino** 

**BLA – Black Metal** 

**BCC - Black Canyon City\*** 

BLR - Black Rock

BRO - Brookbank Pt.

**CAR – Carol Springs** 

**CGM - Casa Grande\*** 

CHI - Childs Mtn.

**CHR - Christmas Tree** 

**CUN – Cunningham** 

**DEV – Desert View** 

**DOS – Dos Cabezas** 

ELD - Mt. Elden

**GRE - Greens Pk.** 

**GUA - Guadalupe** 

**GUT – Guthrie** 

**HEL - Heliograph** 

**HOL - Holbrook DPS** 

**HUA – Hualapai** 

JAC - Jacob Lake

JUN – Juniper

#### **△**JAC BLR ROO DEV ANT PINA CHR ELD JUN HOP **ROB** BRON R GRE BL A BCC △ ORD CAR GUA SIG QA **CAS** T △ TEL HEL **△CHI** LEM & DOS QUI **KEY** TEX BER NOG A

#### **PROPOSED SITES**

**KEY - Keystone** 

**LEM - Mt Lemmon** 

MIN – Mingus Mtn

MUL - Mule Mtn.

NAV - Navajo

**NOG - Nogales Hill** 

OAT - Oatman

ORD - Mt Ord

**PIN – Piney Hill** 

QUI - Quijotoa

**ROB - Roberts Ranch** 

**ROO - Roof Butte** 

**SCH – Schnebly** 

SIG - Signal Peak

**SOU – South Mtn** 

**SQU – Squaw Peak** 

TEL – Telegraph

**TEX - Texas Canyon** 

**THO - Thompson Peak** 

**TOW - Towers** 

WHI - White Tanks

WIL - Bill Williams

WLB - Willow Beach

#### \* New Sites



### A.I.R.S. 2007 Activities



In 2007, the list of 45 was trimmed to 38 proposed sites

AZ Div of Emergency Management purchased 38 Suites

By the end of 2007 16 Suites remained

Planned Locations for remaining 16 Suites:

Brookbank Roberts Ranch

Black Canyon City Dos Cabezas

**Carol Springs Desert View** 

Quijotoa Roof Butte

Lake Havasu (La Paz County)

Juniper

Squaw Peak

Black Rock

Jacob Lake

Antelope Mesa

Mingus Mt

Mohave County Sheriff's Office purchased a suite for it's Aubry Peak Site. A new communication shelter is required at Aubry Peak. Once completed, DPS agreed to perform the installation.



### 2007 A.I.R.S. SITE PROPOSALS

## WIRELESS SYSTEMS BUREAU

#### **PROPOSED SITES**

**ANT – Antelope Mesa** 

**AUB - Aubrey Peak** 

**BER - Bernardino** 

BLR - Black Rock

BRO - Brookbank Pt.

CHI - Childs Mtn.

**CHR – Christmas Tree** 

ELD - Mt. Elden

**GRE - Greens Pk.** 

**GUT – Guthrie** 

**HAV – Lake Havasu** 

**HEL - Heliograph** 

**HOL - Holbrook DPS** 

**HUA - Hualapai** 

JAC - Jacob Lake

JUN – Juniper

**KEY – Keystone** 

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#### **PROPOSED SITES**

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**DPS Trailer (Mobile)** 



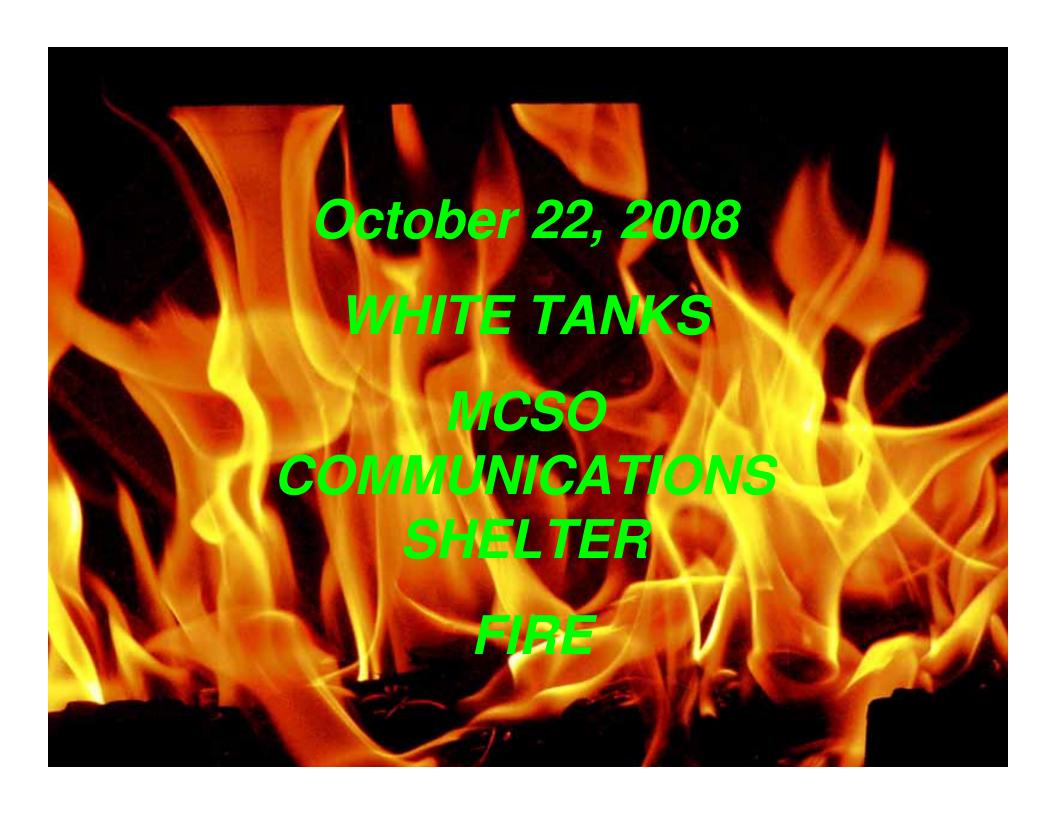
## A.I.R.S.



### **2008 Installation Activities**

### Planned Locations Relocated:

Suite for	Reason	Relocated To
Dos Cabezas	No DPS Site	Cunningham Peak
Black Canyon City	No Site	MCSO – Thompson Pk
Carol Springs	Impractical Location	MCSO - White Tanks
Desert View	No Room at Site	DPS Mobile Trailer
Roof Butte	No Room at Site	Mount Ord





## A.I.R.S. 2008 Activities



In 2008, to Date DPS has installed 11 A.I.R.S. Suites.

A mobile A.I.R.S. configuration in a DPS
 Trailer



## A.I.R.S. DPS MOBILE A.I.R.S.







## A.I.R.S. DPS MOBILE A.I.R.S.



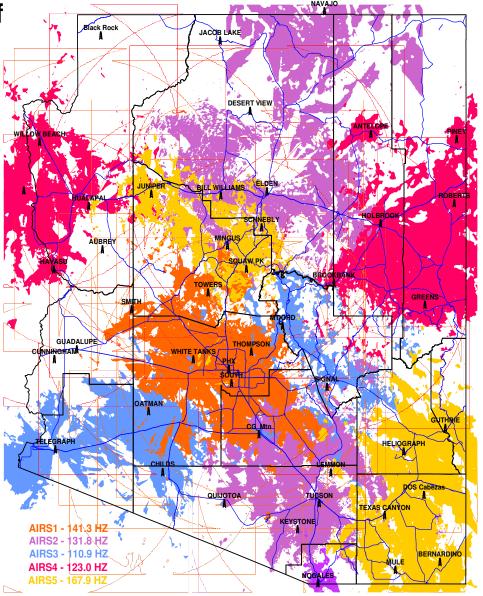


#### AIRS REGIONAL RADIO COVERAGE

A.I.R.S.

Coverage as of

2008







# A.I.R.S. Planned Installation (Future Activities)



### Planned and Future Installation Activities include

- 4 Remaining AIRS Suites.
  - Jacob Lake
  - Black Rock
  - Cunningham Peak
  - Quijotoa
- State EOC Microwave Link to the A.I.R.S.



## ARIZONA DEPARTMENT OF PUBLIC SAFETY





## **QUESTIONS?**

Presented By Greg Manning Telecommunications Project Manager